

REMARKS

Claims 21, 23, 25-27, 30 and 32-44 are pending in the present application.

Rejections Under 35 U.S.C. § 103

Claims 21, 23 and 35-38 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application No. 2002/0171843 to Frankel ("Frankel") in view of U.S. Patent No. 5,969,851 to Clark ("Clark"). Claim 25 was rejected under 35 U.S.C. 103(a) as being unpatentable over Frankel in view of Clark and further in view of U.S. Patent No. 6,535,290 to Spanner ("Spanner"). Claims 26 and 27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Frankel in view of Clark and further in view of U.S. Patent No. 3,905,684 to Cook ("Cook"). Claims 30 and 32-34 were rejected under 35 U.S.C. 103(a) as being unpatentable over Frankel in view of Clark and further in view of U.S. Patent No. 4,746,798 to Amon ("Amon"). Claim 39 was rejected under 35 U.S.C. 103(a) as being unpatentable over Frankel in view of Clark and further in view of U.S. Patent No. 6,248,988 to Krantz ("Krantz"). Claim 41 was rejected under 35 U.S.C. 103(a) as being unpatentable over Frankel in view of Clark and Krantz and further in view of Cook. Claims 42-44 were rejected under 35 U.S.C. 103(a) as being unpatentable over Frankel in view of Clark and Krantz and further in view of Amon.

Frankel describes a phase-based wavelength measurement apparatus for determining an unknown wavelength of a laser by measuring the phase difference between two orthogonally polarized beams derived from the laser. See Abstract. Light from a laser 11a is directed through a dichroic mirror 13b and onto a polarization analyzer 17a. See Frankel, paragraph 0029; and Figure 1. Light from a reference laser 11b is directed onto dichroic mirror 13b, which reflects the light onto a polarization analyzer 17b. See Frankel, paragraph 0029; and Figure 1.

Independent claim 21 of the present application recites "a first dispersive element configured to split a first reference beam from the first light beam and a second reference beam from the second light beam; a second dispersive element configured to split a third reference beam

from the first light beam and a fourth reference beam from the second light beam.”

Independent claim 39 of the present application recites “splitting a first reference beam from the first light beam using a first dispersive element; splitting a second reference beam from the second light beam using the first dispersive element; splitting a third reference beam from the first light beam using a second dispersive element; splitting a fourth reference beam from the second light beam using the second dispersive element.”

It is respectfully submitted that Frankel does not teach or suggest a first dispersive element that splits a first reference beam from a first light beam and a second reference beam from the second light beam, and a second dispersive element that splits a third reference beam from the first light beam and a fourth reference beam from the second light beam, as recited in independent claims 21 and 39. In contrast, the dichroic mirror 13b of Frankel merely reflects the light beam from reference laser 11b into polarization analyzer 17b and passes the light beam from laser 11a onto polarization analyzer 17a. And polarization analyzer 17a merely splits the light beam from laser 11a into two parts. See Frankel, paragraphs 0029 and 0030; and Figure 1. Thus, each of elements 13b and 17a do not split a reference beam from each of first and second light beams, as required by independent claims 21 and 39.

Clark, Spanner, Cook, Amon and Krantz are not relied on for teaching or suggesting the aforementioned features of independent claims 21 or 39. Indeed, it is respectfully submitted that these references do not teach or suggest the features of a first dispersive element configured to split a first reference beam from a first light beam and a second reference beam from the second light beam and a second dispersive element configured to split a third reference beam from the first light beam and a fourth reference beam from the second light beam, as recited in independent claims 21 and 39.

Because each of Frankel, Clark, Spanner, Cook, Amon and Krantz is missing at least the above-recited features of independent claims 21 and 39, it is respectfully submitted that any

Application No. 10/521,892
Response dated April 3, 2008
Reply to Office Action of October 4, 2007

Docket No.: 20793/0204845-US0

combination of these references, to the extent proper, could not render independent claims 21 or 39, or any of their respective dependent claims, unpatentable.

Withdrawal of the respective rejections of claims 21, 23, 25-27, 30 and 32-44 under 35 U.S.C. § 103(a) based on respective combinations of Frankel, Clark, Spanner, Cook, Amon and Krantz is respectfully requested.

Application No. 10/521,892
Response dated April 3, 2008
Reply to Office Action of October 4, 2007

Docket No.: 20793/0204845-US0

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Dated: April 3, 2008

Respectfully submitted,

By 

Erik R. Swanson

Registration No.: 40,833
DARBY & DARBY P.C.
P.O. Box 770
Church Street Station
New York, New York 10008-0770
(212) 527-7700
(212) 527-7701 (Fax)
Attorneys/Agents For Applicant